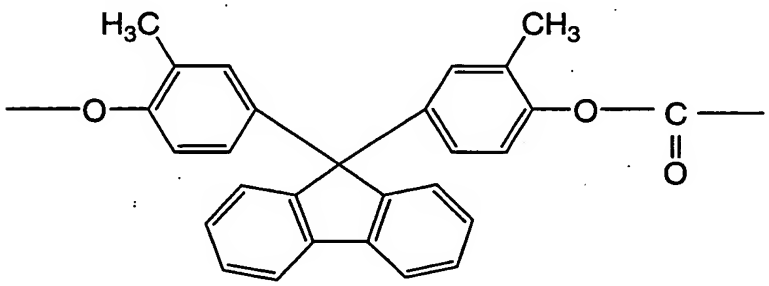
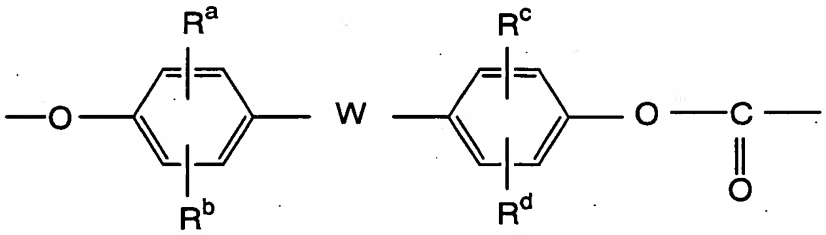
CLAIMS

1. A polycarbonate copolymer comprising 5 to 95 mol% of recurring unit (component a) represented by the following general formula (I):



(I)

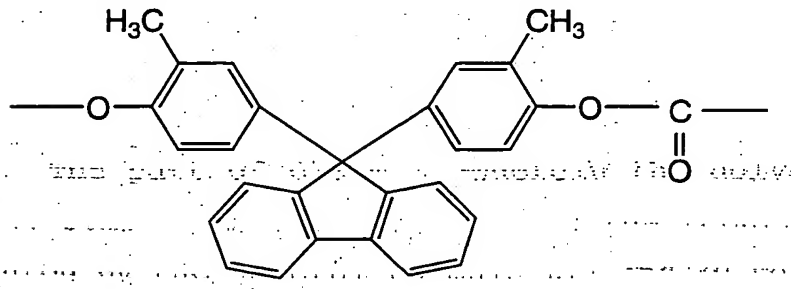
and 95 to 5 mol% of recurring unit (component b) represented by the following general formula (II):



(II)

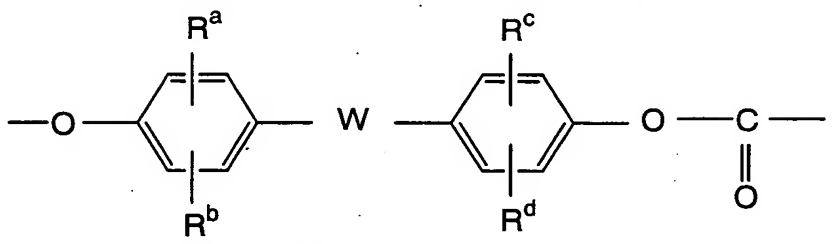
(wherein R^a to R^d are each independently a hydrogen atom, a hydrocarbon group which may contain an aromatic group having 1 to 9 carbon atoms or a halogen atom, and W is a single bond, a hydrocarbon group which may contain an aromatic group having 1 to 20 carbon atoms or an O, S, SO, SO_2, CO or COO group).

2. A heat resistant part comprising a polycarbonate copolymer, the polycarbonate copolymer comprising 5 to 95 mol% of recurring unit (component a) represented by the following general formula (I):



(I)

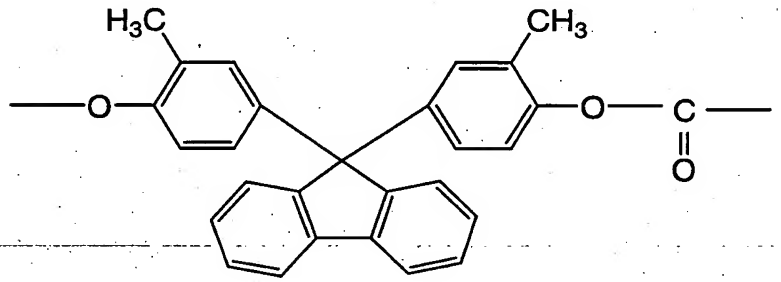
and 95 to 5 mol% of recurring unit (component b) represented by the following general formula (II):



(II)

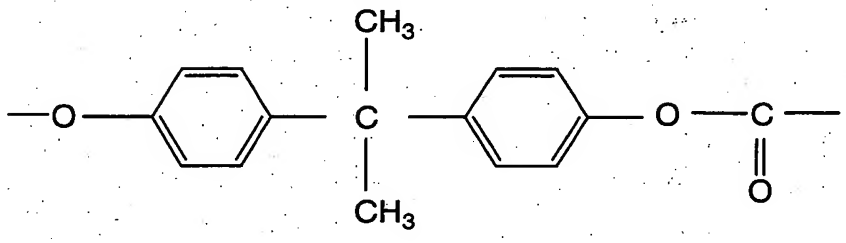
(wherein R^a to R^d are each independently a hydrogen atom, a hydrocarbon group which may contain an aromatic group having 1 to 9 carbon atoms or a halogen atom, and W is a single bond, a hydrocarbon group which may contain an aromatic group having 1 to 20 carbon atoms or an O, S, SO, SO_2, CO or COO group).

3. A part for reflow soldering, the part comprising a polycarbonate copolymer, the polycarbonate copolymer comprising 60 to 95 mol% of recurring unit (component a) represented by the following general formula (I):



(I)

and 40 to 5 mol% of recurring unit (component b) represented by the following general formula (II-1).



(II-1)

4. The part of claim 3, wherein the polycarbonate copolymer comprises 70 to 85 mol% of the recurring unit represented by the general formula (I) and 30 to 15 mol% of

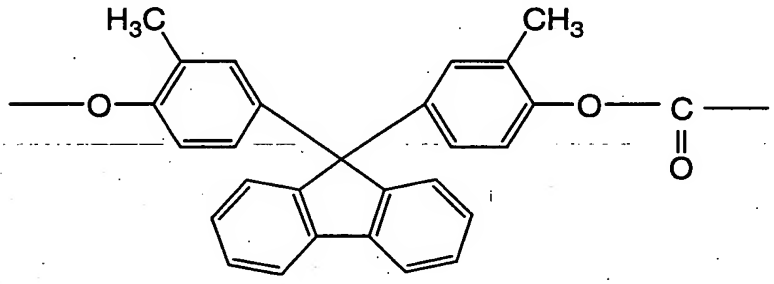
the recurring unit represented by the general formula (II-1).

5. The part of claim 3, wherein the polycarbonate copolymer shows a specific viscosity of 0.17 to 0.55 which is measured at 20° C, dissolving 0.7 g of the copolymer in 100 ml of methylene chloride.

6. The part of claim 3, wherein the polycarbonate copolymer shows a glass transition temperature (Tg) of 200 to 250° C which is measured at a temperature increasing rate of 20° C/min.

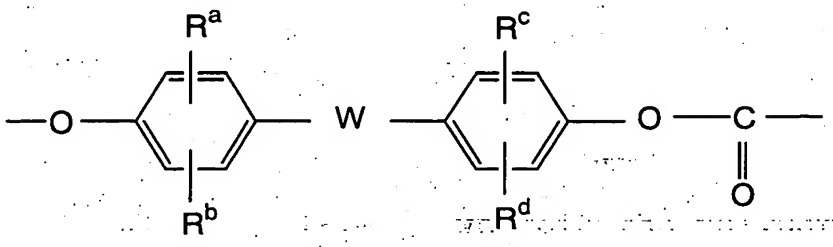
7. The part of claim 3, which is a lens, lens barrel or prism.

8. A light path converting part comprising a polycarbonate copolymer, the polycarbonate copolymer comprising 50 to 95 mol% of recurring unit (component a) represented by the following general formula (I):



(I)

and 50 to 5 mol% of recurring unit (component b) represented by the following general formula (II):



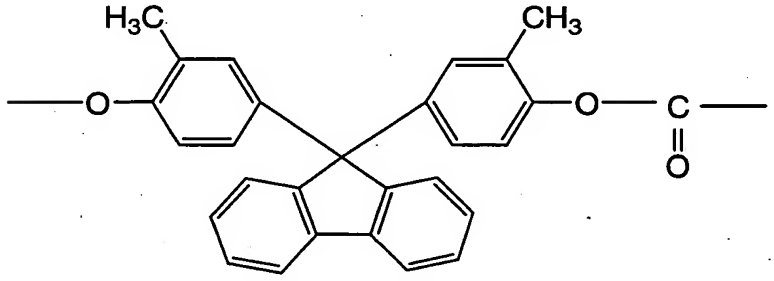
(II)

(wherein R^a to R^d are each independently a hydrogen atom, a hydrocarbon group which may contain an aromatic group having

1 to 9 carbon atoms or a halogen atom, and W is a single bond, a hydrocarbon group which may contain an aromatic group having 1 to 20 carbon atoms or an O, S, SO, SO_2, CO or COO group).

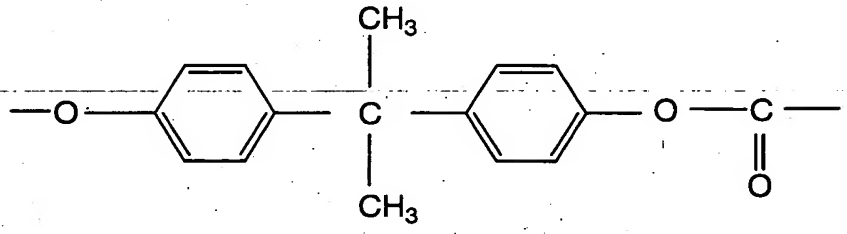
9. The part of claim 8, wherein the polycarbonate copolymer comprises 65 to 75 mol% of the recurring unit represented by the general formula (I) and 35 to 25 mol% of the recurring unit represented by the general formula (II).

10. The part of claim 8, wherein the polycarbonate copolymer comprises 50 to 95 mol% of recurring unit (component a) represented by the following general formula (I):

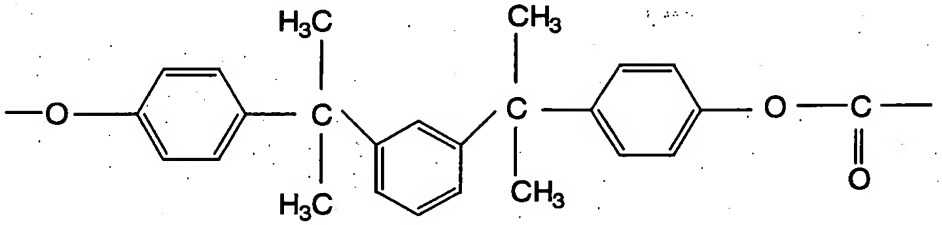


(I)

and 50 to 5 mol% of recurring unit (component b) represented by the following general formula (II-1) and/or (II-2).



(II-1)



(II-2)

11. The part of claim 8, wherein the polycarbonate copolymer shows a transmittance at 550 nm of 80% or higher as a molded plate and satisfies the following expression:

$Re_{550}/d \leq 10$

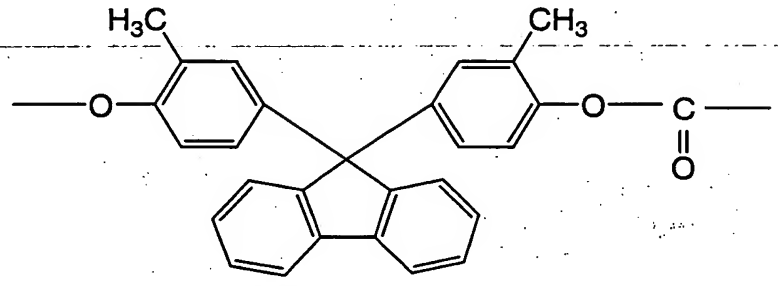
when retardation at 550 nm is Re_{550} (nm) and the thickness of a portion where the transmittance and the retardation are measured is d (mm).

12. The part of claim 8, which is a pickup lens, camera lens, microarray lens, projector lens or prism.

13. An optical disk that comprises a substrate with a thickness of 0.3 to 1.2 mm which has embossed pits or guide grooves, a reflective layer formed on the substrate and a transparent protective layer with a thickness of 3 to 200 μm which is formed on the reflective layer and that reproduces recorded data based on a change in the light intensity of reflected light produced by irradiating the disk with a light beam from the transparent protective layer side,

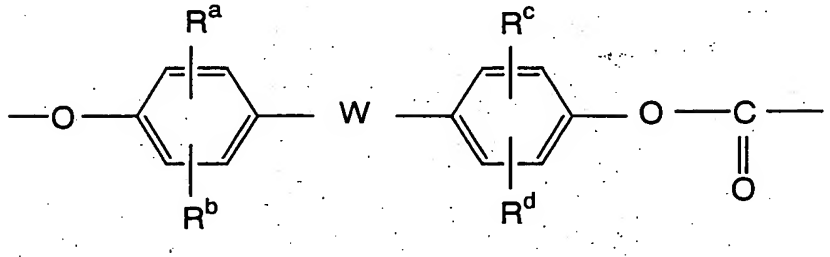
the substrate substantially comprising a polycarbonate copolymer,

the polycarbonate copolymer comprising 20 to 95 mol% of recurring unit (component a) represented by the following general formula (I):



(I)

and 80 to 5 mol% of recurring unit (component b) represented by the following general formula (II):



(II)

(wherein R^a to R^d are each independently a hydrogen atom, a hydrocarbon group which may contain an aromatic group having 1 to 9 carbon atoms or a halogen atom, and W is a single bond, a hydrocarbon group which may contain an aromatic group having 1 to 20 carbon atoms or an O, S, SO, SO_2, CO or COO group), the substrate showing:

(A) a flexural modulus of 2,800 to 4,000 MPa,

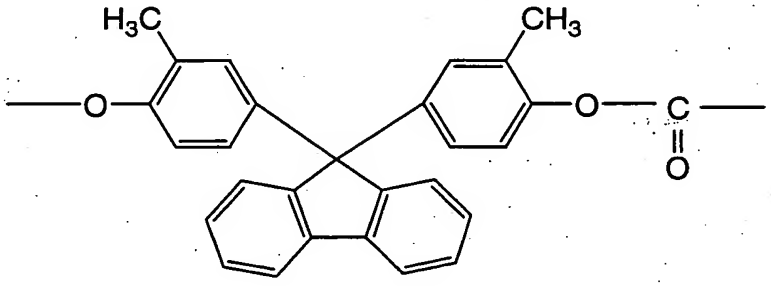
(B) a water absorption of 0.3 wt% or lower upon reaching saturation,

(C) a tanδ measured at 40° C and 18 Hz in accordance with ISO 6721-4 of at least 0.020, and

(D) a deflection temperature under load measured under a load of 1.81 MPa in accordance with ISO 75-1, -2 of 110° C or higher.

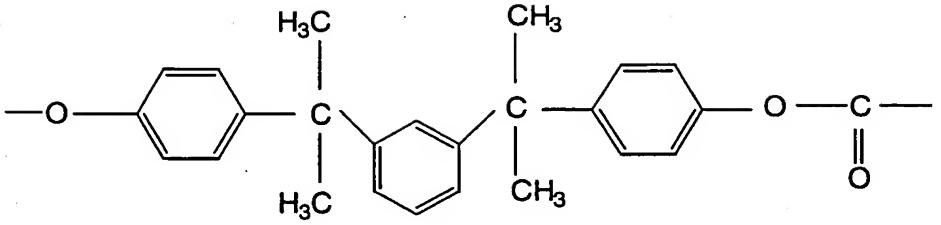
14. The disk of claim 13, wherein the polycarbonate copolymer comprises 25 to 70 mol% of the recurring unit (component a) represented by the general formula (I) and 75 to 30 mol% of the recurring unit (component b) represented by the general formula (II).

15. The disk of claim 13, wherein the polycarbonate copolymer comprises 20 to 95 mol% of recurring unit (component a) represented by the following general formula (I):

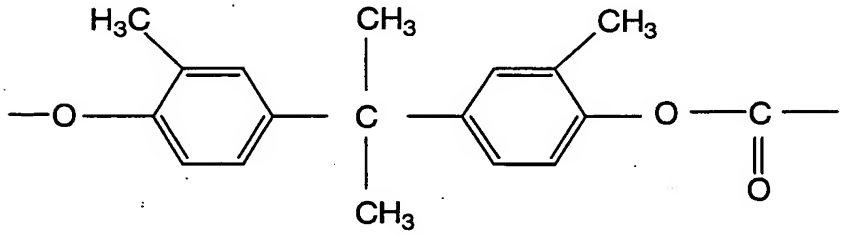


(I)

and 80 to 5 mol% of recurring unit (component b) represented by the following general formula (II-2) and/or (II-3).



(II-2)



(II-3)

16. The disk of claim 13, which has a recording layer between the reflective layer and the transparent protective layer.

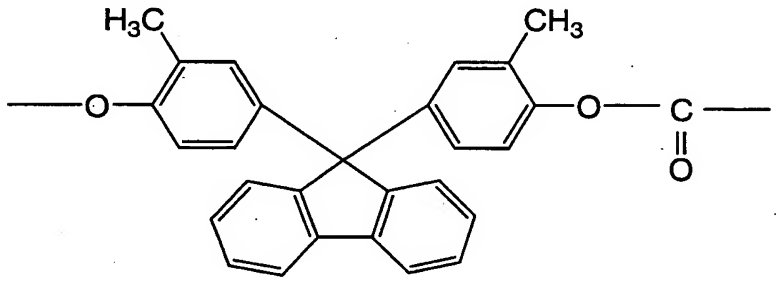
17. The disk of claim 13, wherein the embossed pits or the guide grooves are formed on both surfaces of the substrate, and the reflective layer, the recording layer and/or the transparent protective layer are/is also formed on both surfaces thereof.

18. The disk of claim 13, which has a multilayer structure that the recording layer or the reflective layer is laminated multiple times.

19. The disk of claim 13, wherein the polycarbonate copolymer shows a specific viscosity measured at 20° C of 0.1 to 0.5 when 0.7 g of the copolymer is dissolved in 100 ml of methylene chloride.

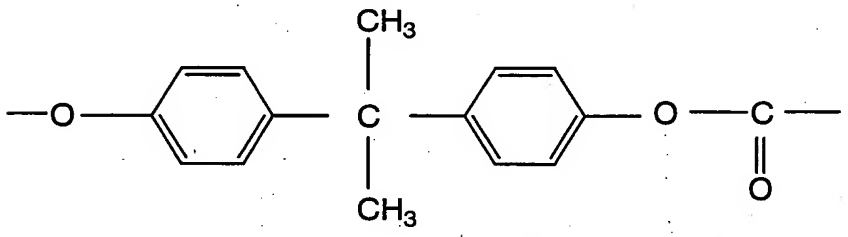
20. The disk of claim 13, wherein the transparent protective layer is composed of the same polycarbonate copolymer as that constituting the substrate.

21. A plastic mirror comprising a polycarbonate substrate and a metallic reflective film,
the polycarbonate substrate comprising a polycarbonate copolymer,
the polycarbonate copolymer comprising 20 to 70 mol% of recurring unit (component a) represented by the following general formula (I):

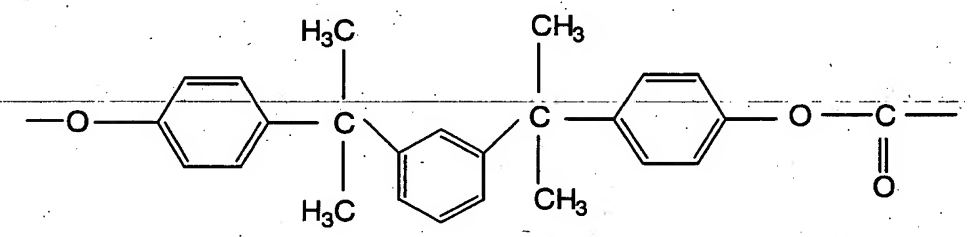


(I)

and 80 to 30 mol% of recurring unit (component b) represented by the following general formula (II-1) and/or (II-2):



(II-1)



(II-2)

the polycarbonate substrate showing:
(A) a glass transition temperature of 120 to 230°C,
(B) a water absorption of 0.2 wt% or lower after immersed in water at 23°C for 24 hours, and
(C) a flexural modulus of 2,500 to 4,000 MPa.

22. The mirror of claim 21, wherein the molar ratio of the component a to the component b is 30:70 to 60:40.

23. The mirror of claim 21, wherein the polycarbonate copolymer comprises 20 to 70 mol% of the recurring unit (component a) represented by the general formula (I) and 80 to 30 mol% of the recurring unit (component b) represented by the general formula (II-1), and the polycarbonate substrate shows the following properties, i.e.,
(A) a glass transition temperature of 160 to 230°C,
(B) a water absorption of 0.2 wt% or lower after immersed in water at 23°C for 24 hours, and
(C) a flexural modulus of 2,500 to 3,500 MPa.

24. The mirror of claim 21, wherein the polycarbonate copolymer comprises 20 to 70 mol% of the recurring unit (component a) represented by the general formula (I) and 80 to 30 mol% of the recurring unit (component b) represented by the general formula (II-2), and the polycarbonate substrate shows the following properties, i.e.,
(A) a glass transition temperature of 120 to 180°C,
(B) a water absorption of 0.1 wt% or lower after immersed in water at 23°C for 24 hours, and
(C) a flexural modulus of 2,800 to 4,000 MPa.

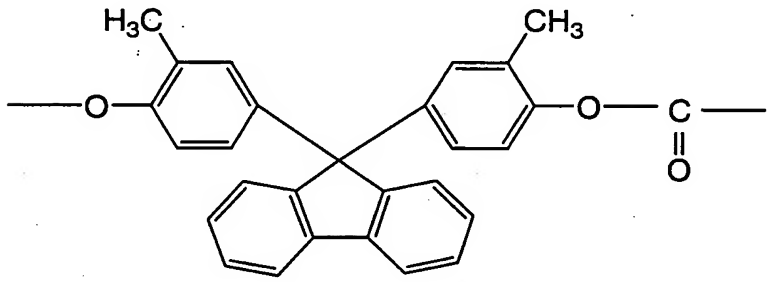
25. The mirror of claim 21, wherein the polycarbonate copolymer shows a specific viscosity measured at 20°C of 0.1 to 0.5 when 0.7 g of the copolymer is dissolved in 100 ml of methylene chloride.

26. The mirror of claim 21, wherein the polycarbonate copolymer shows an amount flown out in 10 minutes at 300°C and 1.2 kgf in an MVR measurement of not smaller than 5 cm^3.

27. The mirror of claim 21, which has a spherical, non-spherical, flat or polyhedral shape.

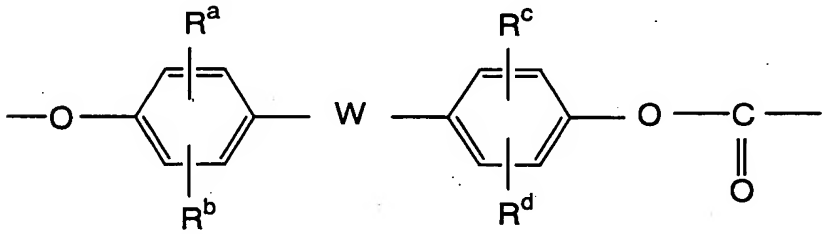
28. The mirror of claim 21, which is a polygon mirror or projector mirror.

29. A conductive resin composition comprising a polycarbonate copolymer and a carbon based filler, the polycarbonate copolymer comprising 5 to 95 mol% of recurring unit (component a) represented by the following general formula (I):



(I)

and 95 to 5 mol% of recurring unit (component b) represented by the following general formula (II):



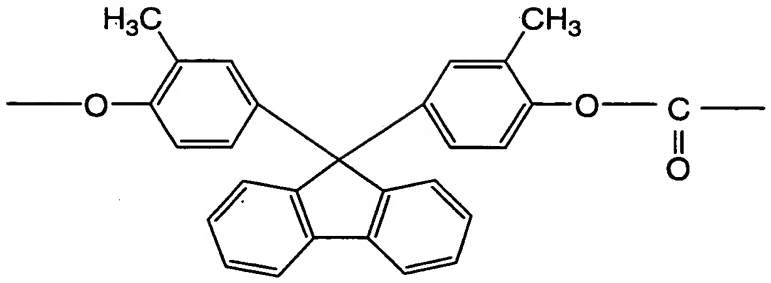
(II)

(wherein R^a to R^d are each independently a hydrogen atom, a hydrocarbon group which may contain an aromatic group having 1 to 9 carbon atoms or a halogen atom, and W is a single bond, a hydrocarbon group which may contain an aromatic group having 1 to 20 carbon atoms or an O, S, SO, SO_2, CO or COO group).

30. The composition of claim 29, which comprises 40 to 99 wt% of the polycarbonate copolymer and 60 to 1 wt% of the carbon based filler.

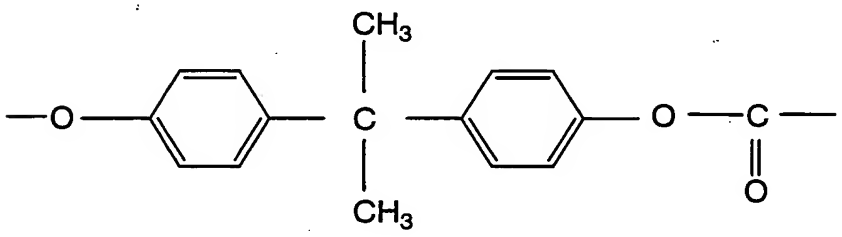
31. The composition of claim 29, wherein the polycarbonate copolymer comprises 5 to 95 mol% of recurring unit (component a) represented by the following general

formula (I):



(I)

and 95 to 5 mol% of recurring unit (component b) represented by the following general formula (II-1).



(II-1)

32. A tray for conveying an electronic part, the tray comprising the composition of claim 29.

33. The tray of claim 32, wherein the electronic part is a semiconductor, an optical data recording medium or a hard disk.